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Docket No. P-6013

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Alarcon et al.

Serial No.: 10/721,797

Art Unit: 3736

Filing Date: November 26, 2003

Examiner: Unassigned

For: **Fiber Optic Device For Sensing Analytes**

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P.O. Box 1450  
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Sir:

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It is respectfully submitted that the disclosure of the above documents do not constitute an admission that they are relevant or material to the claims or are "prior art" to the subject application. The citation of them is not to be considered as a representation that no better art exists or that a search has been made.

Respectfully submitted,

Dated: June 24, 2004

By: Nanette S. Thomas  
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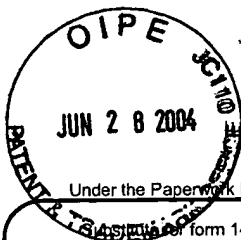
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PTO/SB/08A (04-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

### Complete if Known

Application Number	10/721,797
Filing Date	November 26, 2003
First Named Inventor	ALARCON, et al.
Art Unit	3736
Examiner Name	
Attorney Docket Number	P-6013

### U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 20030232383	12/18/2003	DAUNERT, et al.	
		US- 20030153026	08/14/2003	ALARCON, et al.	
		US- 20030134346	07/17/2003	AMISS, et al.	
		US- 20030130569	07/10/2003	RASKAS	
		US- 20030130167	07/10/2003	PITNER, et al.	
		US- 6535753	03/18/2003	RASKAS	
		US- 6512939	01/28/2003	COLVIN, et al.	
		US- 20020193672	12/19/2002	WALSH, et al.	
		US- 6432723	08/13/2002	PLAXCO, et al.	
		US- 20020058863	05/16/2002	PETERSSON, et al.	
		US- 20020026108	02/28/2002	COLVIN	
		US- 6330464	12/11/2001	COLVIN, et al.	
		US- 6304766	10/16/2001	COLVIN	
		US- 6277627	08/21/2001	HELLINGA	
		US- 6256522	07/03/2001	SCHULTZ	
		US- 6197257	03/06/2001	RASKAS	
		US- 6191847	02/20/2001	MELENDEZ, et al.	
		US- 6157442	12/05/2000	RASKAS	
		US- 6111248	08/29/2000	MELENDEZ, et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO 3060464	07/24/2003	DAUNERT, et al		

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 6081736	06/27/2000	COLVIN, et al.	
		US- 6045756	04/04/2000	CARR, et al.	
		US- 6040194	03/21/2000	CHICK, et al.	
		US- 6024923	02/15/2000	MELENDEZ, et al.	
		US- 5946083	08/31/1999	MELENDEZ, et al.	
		US- 5900215	05/04/1999	SEIFERT, et al.	
		US- 5866433	02/02/1999	SCHALKHAMMER, et al.	
		US- 5747349	05/05/1998	VAN DEN ENGH, et al.	
		US- 5700897	12/23/1997	KLAINER, et al.	
		US- 5628310	05/13/1997	RAO, et al.	
		US- 5626134	05/06/1997	ZUCKERMAN	
		US- 5605152	02/25/1997	SLATE, et al.	
		US- 5569911	10/29/1996	TOMLINSON, et al.	
		US- 5552272	09/03/1996	BOGART	
		US- 5496997	03/05/1996	POPE	
		US- 5377676	01/03/1995	VARI, et al.	
		US- 5341805	08/30/1994	STAVRIDIS, et al.	
		US- 5219527	06/15/1993	HUI, et al.	
		US- 5154890	10/13/1992	MAUZE, et al.	

**FOREIGN PATENT DOCUMENTS**

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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BALLERSTADT, et al., (1997) Competitive-Binding Assay Method Based On Fluorescence Quenching Of Ligands Held In Close Proximity By A Multivalent Receptor. Anal. Chim. Acta 345:203-12.	
		BLAIR, et al., (1994) Fiber Optic Sensor for Ca <sup>2+</sup> Based on an Induced Change in the Conformation of the Protein Calmodulin. Anal Chem., 66:300-2.	
		DE LORIMIER, et al., (2002) Construction Of A Fluorescent Biosensor Family. Protein Sci. 11:2655-75.	
		GILARDI, et al., Engineering The Maltose Binding Protein For Reagentless Fluorescence Sensing (1994) Anal. Chem., 66:3840-47.	
		HELLINGA, et al., (1998) Protein Engineering And The Development Of Generic Biosensors. Trends Biotechnol. 16:183-89.	
		RUSSELL, et al., (1999) A Fluorescence-Based Glucose Biosensor Using Concanavalin A And Dextran Encapsulated In A Poly(Ethylene Glycol) Hydrogel. Anal. Chem. 71:3126-32.	
		SALINS, et al., (2001) A Novel Reagentless Sensing System For Measuring Glucose Based On The Galactose/Glucose-Binding Protein. Anal Biochem. 294:19-26.	
		SHILTON, et al., (1996) Conformational Changes Of Three Periplasmic Receptors For Bacterial Chemotaxis And Transport: The Maltose-, Glucose/Galactose- And Ribose-Binding Proteins. J. Mol. Biol. 264:350-63.	
		TOLOSA, et al., (1999) Glucose Sensor For Low-Cost Lifetime-Based Sensing Using A Genetically Engineered Protein. Anal. Biochem. 267:114-20.	

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